INTERIM CHANGE NOTICE
(ICN)

ICN-PNNL-12057.1

A. Document No.: PNNL-12057 **Revision No.:** 0

Document Title: RCRA Assessment Plan for Single-Shell Tank Waste Management Area T at the Hanford Site

Document's Original Author: F. N. Hodges and C. J. Chou

Effective Date of ICN: 1/23/2002

Change Requested By: Duane G. Horton

B. Action: Add changes defined in Section D below. Attach this ICN to the front of the document, just in front of the title page. lm

C. Effect of Change:
This ICN updates the assessment plan to reflect the current wells in the monitoring system and the current constituent list for WMA T. This ICN supplements all previous ICN's.

D. Reason for Change/Description of Change:

Reason for Change: New wells have been constructed at WMA T and some existing wells have gone dry. Changes to the constituent list are made to correct errors and omissions.

Description of Change: See attached.

E. Document Management Decisions:

See Attached Distribution List.

F. Approval Signatures
(Please Sign and Date)

Process Quality Department T. G. Walker Thomas G Walker 2-27-02

Approval Authority: SP Luttrell, project management Date: 2/27/02

Other Approvals: D. G. Horton, Technical D G Horton 2/6/02 Date:

M. J. Hartman, Technical Reviewer Mary J Hartman 6 Feb 02 Date: _____

Type of Change: (Check one):

___ Minor ___ Major X

Description of Changes

This ICN updates the groundwater monitoring network as it was described in the subject document.

The groundwater monitoring network for single-shell tank Waste Management Area T currently consists of 14 wells. Figure R1.1.2 shows the monitoring wells in the WMA T monitoring network and replaces Figure 1.2 (page 1.3), Figure 3.1 (page 3.3), and Figure A.2 (page A.5) in the original plan. The 14 wells in the WMA T network are listed in Table R1-3.1a, which replaces Table 3.1.a on page 3.2 of the original plan.

Changes to the groundwater monitoring network since the subject assessment plan was written include:

- groundwater monitoring well 299-W10-12 is dropped from the network because it was decommissioned in August 2000
- monitoring wells 299-W11-23 and 299-W11-28 are dropped from the network because they are dry
- monitoring wells 299-W10-22, 299-W11-30, 299-W11-39, 299-W11-40, 299-W11-41, and 299-W11-42 are added to the network as downgradient monitoring wells
- monitoring well 299-W10-28 is added to the network as a new upgradient monitoring well
- monitoring well 299-W11-24 is dropped from the network because it is a non-RCRA well and has been replaced by new well 299-W11-42.

As-built diagrams for the new wells are attached to this ICN.

Wells 299-W10-1 and 200-W10-28 are upgradient wells; all others are downgradient wells. Wells 299-W11-7 and 299-W11-30 are mid-field wells. Table R1.3.1a indicates that the new upgradient well 299-W10-28 replaces existing well 299-W10-1. Well 299-W10-1 will be dropped from the monitoring network after two quarters of co-sampling with the new well. If the results of the co-sampling events are significantly dissimilar, co-sampling will continue for at least an additional quarter.

Attached Figure R1.1.5 is an updated water table map to replace the water table map shown as Figure 1.5 (page 1.6) in the original plan.

The updated constituent list for WMA T is shown in Table R1.3.2. Table R1.3.2 replaces Table 3.2 (page 3.6) in the original assessment plan. Changes to the constituent list include:

- Removal of total dissolved solids from List A
- Removal of total organic carbon from List B
- Move gross alpha and gross beta from List A to List B
- Turbidity is added to List A
- Add iodine-129 to List C.

Total dissolved solids is removed from the constituent list because it is a poor indicator parameter compared with turbidity, specific conductance, and alkalinity. Total organic carbon is removed from the constituent list because the carbon tetrachloride plume from Z Plant facilities completely underlies WMA T such that a release of organics from the WMA would be masked by the carbon tetrachloride plume.

Gross alpha and gross beta are moved from List A to List B and are being analyzed semi-annually because WMA T is in assessment monitoring, and as such, has samples analyzed for specific isotopes of concern. The indicator parameters gross alpha and gross beta are analyzed semi-annually as a check on

the results of analyses for specific isotopic constituents. Iodine-129 was added to List C as a new constituent because the iodine-129 plume from the WMA TX-TY area is mapped just to the southeast of WMA T (Hartman, M. J., L. F. Morasch, and W. D. Webber. 2001. *Hanford Site Groundwater Monitoring for Fiscal Year 2000*. PNNL-13404, Pacific Northwest National Laboratory, Richland, Washington). Also, turbidity was inadvertently omitted from List A and is, therefore, added to that list.

Table R1.3.1a. Assessment Monitoring Network, Constituent List and Sampling Frequency for WMA T

Well Name	RCRA Standard	Sampling Frequency[(a)] and Constituent List[(b)]	Comment
299-W10-1	N	Q – List A SA – List B	Replaced by well 299-W10-28
299-W10-4	N	Q – List A SA – List B	
299-W10-8	N	Q – List A SA – List B	
299-W10-22	Y	SA – List A	
299-W10-23	Y	Q – List A SA – List B	
299-W10-24	Y	Q – List A SA – List B, List C (gamma scan) A – List C (Sr-90)	
299-W10-28	Y	Q – List A SA – List B	New (2001) upgradient well replaces well 299-W10-1
299-W11-7	N	SA – List A	Mid-field well
299-W11-12	N	Q – List A SA – List B	
299-W11-30	Y	SA – List A	Mid-field well
299-W11-39	Y	Q – List A SA – List B, List C (gamma scan) A – List C (Sr-90)	New downgradient well
299-W11-40	Y	Q – List A SA – List B	New downgradient well
299-W11-41	Y	Q – List A SA – List B, List C (gamma scan) A – List C (I-129)	New downgradient well
299-W11-42	Y	Q – List A SA – List B, List C (gamma scan) A – List C (Sr-90)	New well, replaces non-RCRA well 299-W11-24

(a) SA = Semiannually; Q = Quarterly; A = Annually.
(b) Letters refer to Lists in Table R1.3.2.

Table R1.3.2. Analytical Constituents for Waste Management Area T

List A	List B	List C[a]
Turbidity[b]	Gross alpha	Strontium-90
Specific conductance[b]	Gross beta	Special analyses[c]
pH[b]		I-129
Temperature[b]		Gamma Scan
Inductively coupled plasma metals		
Anions		
Alkalinity		
Technetium-99		
Tritium		

(a) Constituents from List C are individually selected for appropriate wells.
(b) Field measured parameter.
(c) Non-routine analyses may include ruthenium-101, selenium-79, americium-241, and neptunium-237.

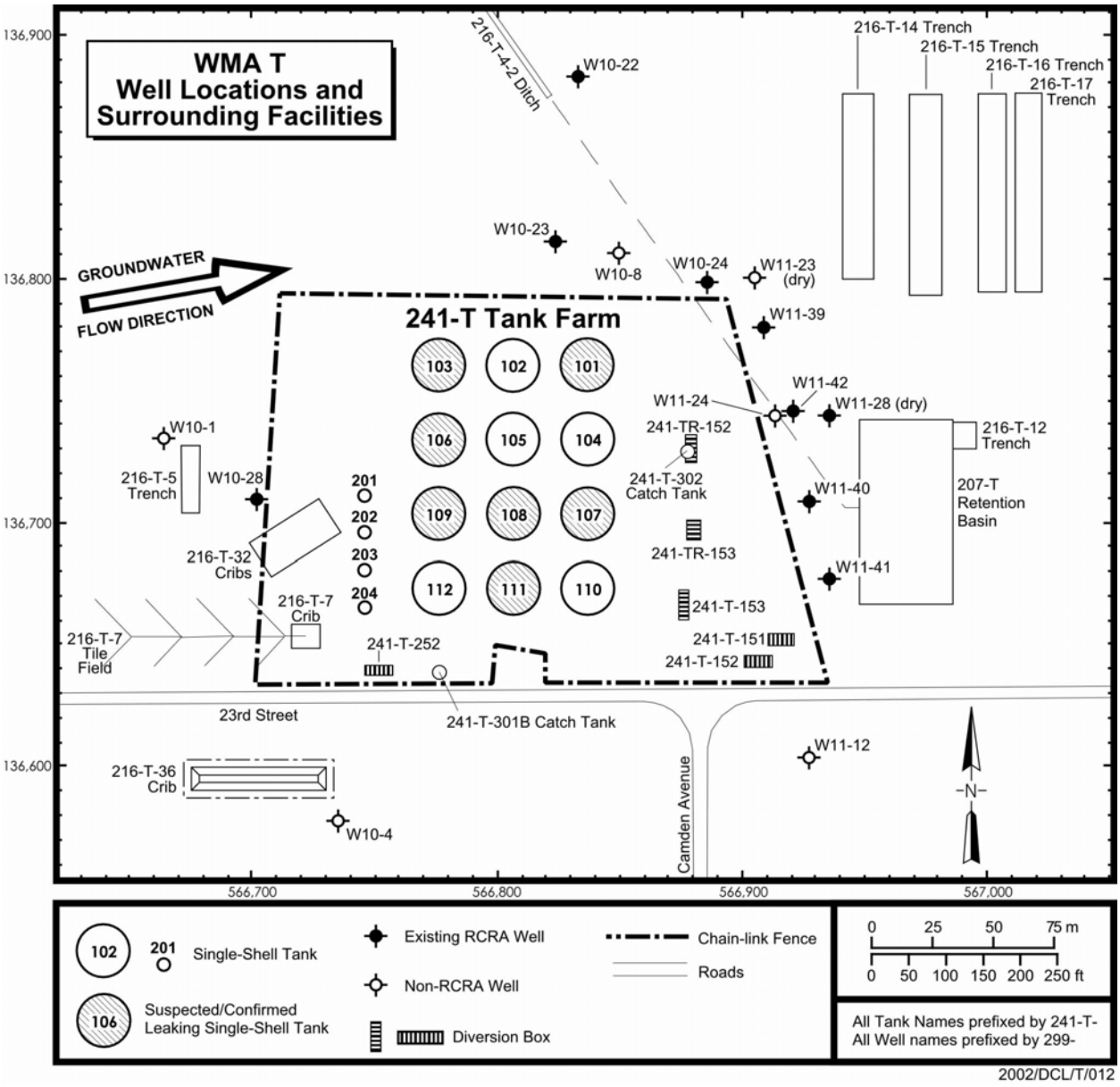


Figure R1.1.2. Map of WMA T and Wells in the WMA T Groundwater Monitoring Network. Wells 299-W11-7 and 299-W11-30 are mid-field wells and are located about 300 meters (299-W11-30) and 350 meters (299-W11-7) east of the WMA.

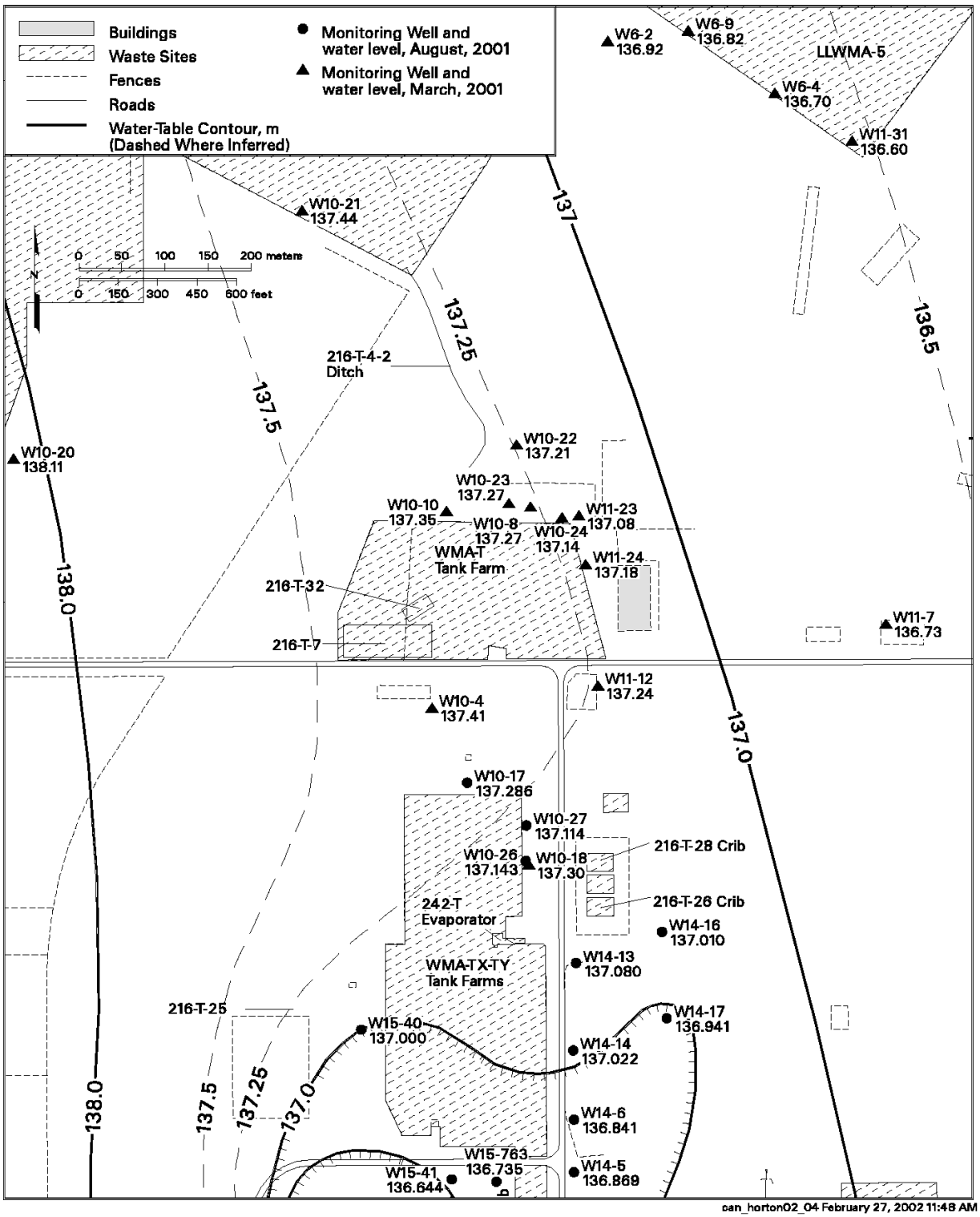


Figure R1.1.5. Water Table, March and August 2001

0540437

WELL CONSTRUCTION AND COMPLETION SUMMARY

Drilling Method:	Cable Tool	Sample Method:	Grab/Split Spoon
Drilling Fluid Used:	none	Additives Used:	none reported
Driller's Name:	G. Howell	WA State Lic Nr:	1930
Drilling Company:	RSI	Company Location:	Woodland, Ca.
Date Started:	10Sep01	Date Completed:	17Oct01

WELL NUMBER: 299-W10-28 C3400 TEMPORARY WELL NO: Not Allowed

Coordinates: N Not documented

Coordinates: E Not documented

Start Card #: R037816

Elevation Ground Surface:

Depth to Water: 225.51 ft. ft 17Oct01
(Ground surface)

GENERALIZED STRATIGRAPHY Geologist's Log

0 - 3 ft : Silty Sandy Gravel
3 - 14 ft : Sand
14 - 24 ft : Sandy Gravel
24 - 27.5 ft : Sand
27.5 - 50 ft : Sandy Gravel

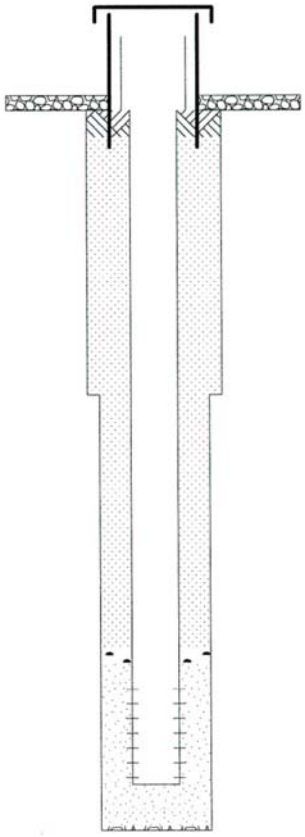
50 - 79.9 ft : Sand

79.9 - 84.5 ft : Silt & Sand
84.5 - 87 ft : Sand
87 - 96.5 ft : Sandy Silt
96.5 - 101 ft : Caliche

112 - 114 ft : Sandy Silt
114 - 121 ft : Sand w/occasioal silt lenses
121 - 129 ft : Sandy Silt
129 - 131 ft : Silty Sandy Gravel
131 - 142 ft : Gravelly Sandy Silt
142 - 173 ft : Silty Sandy Gravel

173 - 274 ft : Silty Sandy Gravel more cemented than from 142-173 ft

274 - 274.5 ft : Silty Sand
274.5 - 280 ft : Gravelly Sand



280 ft : Borehole drilled depth

0 - 111 ft : 11-in. Cable Tool 10-5/8" CS Temp csg
111 - 280 ft : 9-in. Cable Tool 8-5/8" CS Temp csg

Elevation of Reference Point: m

Height of Reference Point Above Ground Surface:

Depth of Surface Seal: 10.3 ft.

Type of Surface Seal: 4x4 Concrete Pad

Fill	*Casing*	*Screen*
0 - 10.3 ft : 11-inch hole Cement Surface Seal	0 - 225.19 ft : 4 inch 304L SS sch 5 csg	
10.3 - 111 ft : 11-inch hole Granular Bentonite		
111 - 209.4 ft : 9-inch hole Granular Bentonite		
209.4 - 215.3 ft : 9-inch hole 3/8" Bentonite pELLETS 215.3 - 262.19 ft : 9-inch hole 10/20 Silica Sand		225.19 - 260.19 ft : 4 inch 304L SS Wire Wrap .020 slot scrn
262.19 - 271.6 ft : 9-inch hole 10/20 Silica Sand	260.19 - 262.19 ft : 4 inch 304L SS Sump	
271.6 - 273.9 ft : 9-inch hole 3/8" Bentonite Hole Plug 273.9 - 278.3 ft : 9-inch hole 10/20 Silica Sand 278.3 - 280 ft : 9-inch hole Slough		

Drawing By: JEA
Reference: Hanford Wells
Revision: 0
Revision Date: 08Nov01
Print Date: 08Nov01

Report Form: WELLS Project File: WELLS.GPJ

SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS
RESOURCE PROTECTION WELL - 299-W10-28

WELL DESIGNATION	:	**299-W10-28**
CERCLA UNIT	:	
RCRA FACILITY	:	
DEPTH DRILLED (GS)	:	**280.0 ft**
MEASURED DEPTH (GS)	:	**262.19 17Oct01**
AVAILABLE LOGS	:	**Geologist & Geophysical**
DATE EVALUATED	:	**Data not available**
EVAL RECOMMENDATION	:	**Data not available**
LISTED USE	:	**RCRA Monitoring**
CURRENT USER	:	**RCRA & Operations**
PUMP TYPE	:	**Not Documented**
MAINTENANCE	:	**Data not available**
COMMENTS	:	**Cable Tool 11-3/4" CS Temp csg to 111 ft. - 8-5/8" CS Temp csg to 280 ft.**
TV SCAN COMMENTS	:	

Report Form: WELLS Project File: WELLS.GPJ

Drawing By: **JEA**
Reference: **Hanford Wells**
Revision: **0**
Revision Date: **08Nov01**
Print Date: **08Nov01**

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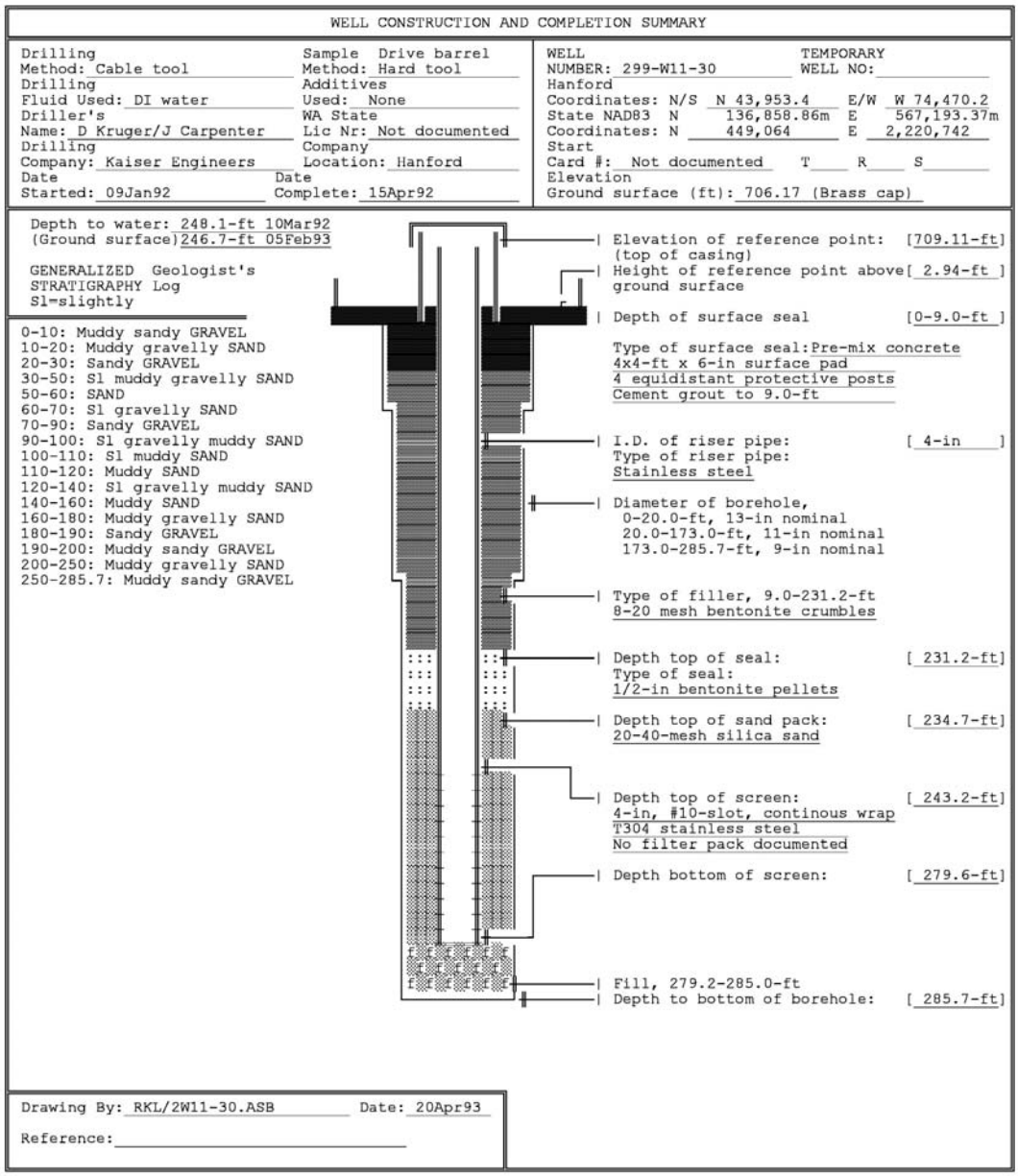

WELL CONSTRUCTION AND COMPLETION SUMMARY
Drilling Method: Cable tool
Drilling Fluid Used: DI water
Driller's Name: D Kruger/J Carpenter
Drilling Company: Kaiser Engineers
Date Started: 09Jan92
Sample Method: Drive barrel
Hard tool
Additives Used: None
WA State Lic Nr: Not documented
Company Location: Hanford
Date Complete: 15Apr92
WELL NUMBER: 299-W11-30
TEMPORARY WELL NO:
Hanford Coordinates: N/S N 43,953.4 E/W W 74,470.2
State NAD83 N 136,858.86m E 567,193.37m
Coordinates: N 449,064 E 2,220,742
Start Card #: Not documented T R S
Elevation Ground surface (ft): 706.17 (Brass cap)
Depth to water: 248.1-ft 10Mar92
(Ground surface) 246.7-ft 05Feb93
GENERALIZED Geologist's STRATIGRAPHY Log
Sl=slightly
0-10: Muddy sandy GRAVEL
10-20: Muddy gravelly SAND
20-30: Sandy GRAVEL
30-50: Sl muddy gravelly SAND
50-60: SAND
60-70: Sl gravelly SAND
70-90: Sandy GRAVEL
90-100: Sl gravelly muddy SAND
100-110: Sl muddy SAND
110-120: Muddy SAND
120-140: Sl gravelly muddy SAND
140-160: Muddy SAND
160-180: Muddy gravelly SAND
180-190: Sandy GRAVEL
190-200: Muddy sandy GRAVEL
200-250: Muddy gravelly SAND
250-285.7: Muddy sandy GRAVEL
Elevation of reference point: [709.11-ft]
(top of casing)
Height of reference point above ground surface [2.94-ft]
Depth of surface seal [0-9.0-ft]
Type of surface seal: Pre-mix concrete
4x4-ft x 6-in surface pad
4 equidistant protective posts
Cement grout to 9.0-ft
I.D. of riser pipe: [4-in]
Type of riser pipe:
Stainless steel
Diameter of borehole,
0-20.0-ft, 13-in nominal
20.0-173.0-ft, 11-in nominal
173.0-285.7-ft, 9-in nominal
Type of filler, 9.0-231.2-ft
8-20 mesh bentonite crumbles
Depth top of seal: [231.2-ft]
Type of seal:
1/2-in bentonite pellets
Depth top of sand pack: [234.7-ft]
20-40-mesh silica sand
Depth top of screen: [243.2-ft]
4-in, #10-slot, continous wrap
T304 stainless steel
No filter pack documented
Depth bottom of screen: [279.6-ft]
Fill, 279.2-285.0-ft
Depth to bottom of borehole: [285.7-ft]
Drawing By: RKL/2W11-30.ASB Date: 20Apr93
Reference:

SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS
RESOURCE PROTECTION WELL - 299-W11-30

WELL DESIGNATION	:	299-W11-30
CERCLA UNIT	:	200 Aggregate Area Management Study
RCRA FACILITY	:	ASID Bioremediation
HANFORD COORDINATES	:	N 43,953.4 W 74,470.2 [200W-07Aug92]
LAMBERT COORDINATES	:	N 449,064 E 2,220,742 [HANCONV]
		N 136,858.86m E 567,193.37m [NAD83-07Aug92]
DATE DRILLED	:	Apr92
DEPTH DRILLED (GS)	:	285.7-ft
MEASURED DEPTH (GS)	:	280.5-ft, 05Feb93
DEPTH TO WATER (GS)	:	248.1-ft, 10Mar92;
		246.7-ft, 05Feb93
CASING DIAMETER	:	4-in stainless steel, +1.7-243.2-ft;
		6-in stainless steel, +2.94-~0.5-ft
ELEV TOP CASING	:	709.11-ft [NGVD'29-07Aug92]
ELEV GROUND SURFACE	:	706.17-ft, Brass cap [NGVD'29-07Aug92]
PERFORATED INTERVAL	:	Not applicable
SCREENED INTERVAL	:	243.2-279.6-ft, 4-in #10-slot stainless steel;
COMMENTS	:	FIELD INSPECTION, 05Feb93;
		6-in stainless steel casing. 4-ft by 4-ft concrete pad, 4 posts, 1 removable capped and locked, brass cap in pad with well ID.
		Not in radiation zone.
		OTHER:
AVAILABLE LOGS	:	Geologist
TV SCAN COMMENTS	:	Not applicable
DATE EVALUATED	:	Not applicable
EVAL RECOMMENDATION	:	Not applicable
LISTED USE	:	No water level data;
		Not on water sample schedule
PUMP TYPE	:	None documented
MAINTENANCE	:	

0532876

WELL CONSTRUCTION AND COMPLETION SUMMARY

Drilling Method:	Cable Tool	Sample Method:	Grab/Split Spoon	WELL NUMBER:	299-W11-39 C3117
Drilling Fluid Used:	none	Additives Used:	None	TEMPORARY WELL NO:	Not Allowed
Driller's Name:	M. Wraspir	WA State Lic Nr:	1909	Coordinates: N	Not documented
Drilling Company:	RSI	Company Location:	Woodland, Ca.	Coordinates: E	Not documented
Date Started:	09Nov00	Date Completed:	18Dec00	Start Card #:	Not Available
				Elevation Ground Surface:	

Depth to Water: **237.31 ft 18Dec00**
(Ground surface)

Elevation of Reference Point: m

Height of Reference Point Above Ground Surface:

Depth of Surface Seal: **10.9 ft.**

Type of Surface Seal: **4x4 Concrete Pad**

GENERALIZED STRATIGRAPHY **Geologist's Log**

0 - 5.5 ft : Backfill
5.5 - 33.5 ft : Sandy GRAVEL

33.5 - 57 ft : Gravelly SAND

57 - 63 ft : SAND
63 - 82.5 ft : Gravelly SAND

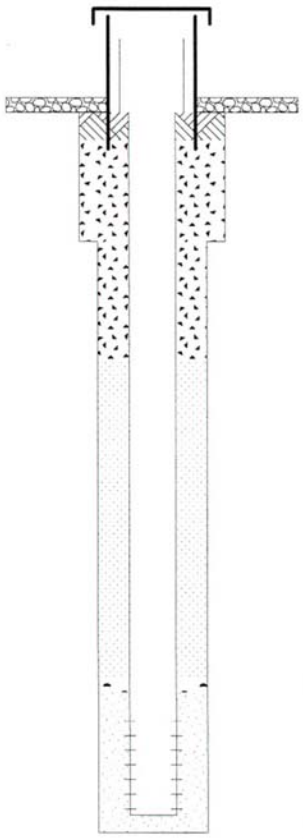
82.5 - 90 ft : SAND
90 - 112 ft : Silty SAND

112 - 127 ft : Slightly Silty SAND

127 - 131 ft : Slightly Silty Gravelly SAND
131 - 145 ft : Silty Sandy GRAVEL

145 - 150 ft : Sandy GRAVEL
150 - 265 ft : Silty Sandy GRAVEL (Sandy GRAVEL at 265)

265 - 282.31 ft : Silty Sandy GRAVEL



Fill	*Casing*	*Screen*
0 - 10.9 ft : 12-inch hole Cement Surface Seal	0 - 238.6 ft : 4 inch 4" 304 SS sch 5 csg.	
10.9 - 50.94 ft : 12-inch hole Bentonite Chips		
50.94 - 96.5 ft : 9-inch hole Bentonite Chips		
96.5 - 222.47 ft : 9-inch hole Granular Bentonite		
222.47 - 227.15 ft : 9-inch hole 1/4" & 1/2" Bentonite pellets		238.6 - 273.66 ft : 4 inch 4" SS Wire Wrap .020 Slot scrn.
227.15 - 275.66 ft : 9-inch hole 10/20 Silica Sand	273.66 - 275.66 ft : 4 inch 4" SS Sump	
275.66 - 282.31 ft : 9-inch hole 10/20 Silica Sand		

282.31 ft : Borehole drilled depth

0 - 50.94 ft : 12-in. Cable Tool 11-3/4 CS Temp. csg.
50.94 - 282.31 ft : 9-in. Cable Tool 8-5/8 CS Temp. csg.

Drawing By: JEA
Reference: Hanford Wells
Revision: 0
Revision Date: 20Mar01
Print Date: 20Mar01

Report Form: WELLS Project File: WELLS.GPJ

BECHTEL

0532874

WELL CONSTRUCTION AND COMPLETION SUMMARY

Drilling Method:	Cable Tool & A. R. Drl & Drive	Sample Method:	Grab/Split Spoon
Drilling Fluid Used:	Air	Additives Used:	None
Driller's Name:	K. Cowden	WA State Lic Nr:	Not Available
Drilling Company:	RSI	Company Location:	Woodland, Ca.
Date Started:	26Sep00	Date Completed:	09Oct00

WELL NUMBER: 299-W11-40 C3118 TEMPORARY WELL NO: Not Allowed

Coordinates: N Not documented

Coordinates: E Not documented

Start Card #: Not Available

Elevation Ground Surface:

Depth to Water: 237.05 ft 06Oct00
(Ground surface)

Elevation of Reference Point: m

Height of Reference Point Above Ground Surface:

Depth of Surface Seal: 10.2 ft

Type of Surface Seal: 4x4 Concrete Pad

GENERALIZED STRATIGRAPHY Geologist's Log

0 - 2 ft : Silty Sandy GRAVEL
2 - 6.5 ft : Slightly Silty SAND
6.5 - 32 ft : Sandy GRAVEL

32 - 43 ft : SAND

43 - 46 ft : Gravelly SAND
46 - 64 ft : SAND

64 - 70 ft : Gravelly SAND
70 - 88 ft : SAND

88 - 92 ft : Slightly Silty SAND
92 - 103 ft : Sandy SILT

103 - 117 ft : Gravelly Silty SAND

117 - 122 ft : Gravelly SAND
122 - 133 ft : Silty SAND

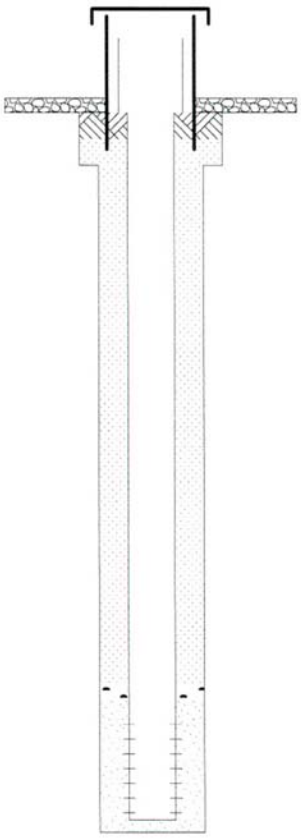
133 - 142 ft : Silty Sandy GRAVEL

142 - 163 ft : Sandy GRAVEL

163 - 170 ft : Silty Sandy GRAVEL
170 - 198 ft : Sandy GRAVEL

198 - 222 ft : Silty Sandy GRAVEL

222 - 280 ft : Sandy GRAVEL



Fill	*Casing*	*Screen*
0 - 10.2 ft : 11.75-inch hole Cement Surface Seal	0 - 238.08 ft : 4 inch 4" 304L SS csg.	
10.2 - 20.5 ft : 11.75-inch hole Granular Bentonite		
20.5 - 222.2 ft : 8.625-inch hole Granular Bentonite		
222.2 - 228.6 ft : 8.625-inch hole 3/8" Bentonite pellets		238.08 - 273.13 ft : 4 inch 4" 304 SS Wire wrap .020 slot scrn
228.6 - 275.18 ft : 8.625-inch hole 10/20 Silica Sand		
275.18 - 280 ft : 8.625-inch hole 10/20 Silica Sand	273.12 - 275.18 ft : 4 inch 4" 304L SS csg.	

280 ft : Borehole drilled depth

0 - 20.5 ft : 11.75-in. 11-3/4" CS Temp. csg set w/Cable Tool
20.5 - 280 ft : 8.625-in. 8-5/8" CS Temp. csg. set w/A.R. Drl & Drive

Drawing By:	JEA
Reference:	Hanford Wells
Revision:	0
Revision Date:	19Mar01
Print Date:	19Mar01

Report Form: WELLS Project File: WELLS.GPJ

0526560

WELL CONSTRUCTION AND COMPLETION SUMMARY

Drilling Method:	Cable Tool/Air Rotary	Sample Method:	Grab/Split Spoon
Drilling Fluid Used:	NA/Air	Additives Used:	None
Driller's Name:	M. Wraspir	WA State Lic Nr:	1909
Drilling Company:	RSI	Company Location:	Woodland, Ca.
Date Started:	04Aug00	Date Completed:	22Aug00

WELL NUMBER: 299-W11-41 C3119 TEMPORARY WELL NO: Not Allowed

Coordinates: N Not documented

Coordinates: E Not documented

Start Card #: R037802

Elevation Ground Surface:

Depth to Water: 236.6 ft. ft 22Aug00 (Ground surface)

GENERALIZED STRATIGRAPHY Geologist's Log

0 - 4 ft : Silty Sandy GRAVEL
4 - 7 ft : Slightly Silty SAND
7 - 33 ft : Silty Sandy GRAVEL

33 - 37 ft : Gravelly SAND
37 - 39 ft : Sandy GRAVEL
39 - 44 ft : SAND
44 - 94 ft : Sand

94 - 98 ft : Silty SAND (calcareous)
98 - 118 ft : Slightly Silty SAND - trace of caliche
103-106 ft

118 - 122 ft : SAND
123 - 133 ft : Sandy SILT
133 - 144 ft : Gravelly Silty SAND

144 - 158 ft : Silty Sandy GRAVEL

158 - 169 ft : Sandy GRAVEL

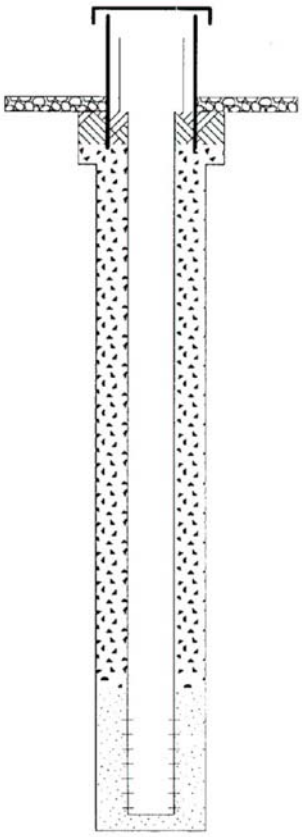
169 - 173 ft : Gravelly SAND
173 - 198 ft : Sandy GRAVEL

198 - 208 ft : Silty Sandy GRAVEL

208 - 213 ft : Sandy GRAVEL
213 - 218 ft : Gravelly SAND
218 - 246 ft : Sandy GRAVEL

246 - 270 ft : Silty Sandy GRAVEL

270 - 280 ft : Sandy GRAVEL



Elevation of Reference Point: m

Height of Reference Point Above Ground Surface:

Depth of Surface Seal: 12.9 ft.

Type of Surface Seal: 4x4 Concrete Pad

Fill	Casing	Screen
0 - 12.9 ft : 12-inch hole Cement Surface Seal	0 - 236.7 ft : 4 inch 4" 304L SS Sch 5 csg	
12.9 - 20.6 ft : 12-inch hole Bentonite Crumbles		
20.6 - 218.8 ft : 9-inch hole Bentonite Crumbles		
218.8 - 226 ft : 9-inch hole Bentonite Pellets		236.7 - 271.7 ft : 4 inch 4" 304L SS Wire Wrap .020 slot scrn.
226 - 273.7 ft : 9-inch hole 10/20 Silica Sand		
273.7 - 280 ft : 9-inch hole 10/20 Silica Sand	271.7 - 273.7 ft : 4 inch 4" SS Sump	

280 ft : Borehole drilled depth

0 - 20.6 ft : 12-in. 11-3/4" CS Temp. csg set w/Cable Tool
20.6 - 280 ft : 9-in. 8-5/8" CS Temp. csg set w/Air Rotary csg hammer

Drawing By: JEA
Reference: Hanford Wells
Revision: 0
Revision Date: 22Sep00
Print Date: 22Sep00

Report Form: WELLS Project File: WELLS.GPJ

BECHTEL

SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS
RESOURCE PROTECTION WELL - 299-W11-41

WELL DESIGNATION	:	**299-W11-41**
CERCLA UNIT	:	
RCRA FACILITY	:	
DEPTH DRILLED (GS)	:	**280.0 ft**
MEASURED DEPTH (GS)	:	**280 22Aug00**
AVAILABLE LOGS	:	**Geologist**
DATE EVALUATED	:	**Data not available**
EVAL RECOMMENDATION	:	**Data not available**
LISTED USE	:	**RCRA monitoring/sampling**
CURRENT USER	:	**RCRA & Operations**
PUMP TYPE	:	**Hydrostar**
MAINTENANCE	:	**Data not available**
COMMENTS	:	**Cable tool to 20.6 ft w/11-3/4" CS csg Air Rotary from 20.6 to 280 ft w/8-5/8" CS csg.**
TV SCAN COMMENTS	:	

Report Form: WELLS Project File: WELLS.GPJ

Drawing By: **JEA**
Reference: **Hanford Wells**
Revision: **0**
Revision Date: **22Sep00**
Print Date: **22Sep00**

BECHTEL

WELL CONSTRUCTION AND COMPLETION SUMMARY

Drilling Method:	Air Rotary Csg. Hammer	Sample Method:	Grab/Split Spoon
Drilling Fluid Used:	Air	Additives Used:	None
Driller's Name:	M. Wraspir	WA State Lic Nr:	1909
Drilling Company:	RSI	Company Location:	Woodland, Ca.
Date Started:	10Sep00	Date Completed:	13Sep00

WELL NUMBER: 299-W11-42 C3242 TEMPORARY WELL NO: Not Allowed

Coordinates: N Not documented

Coordinates: E Not documented

Start Card #: Not Available

Elevation Ground Surface:

0527524

Depth to Water: 238.06 ft 13Sep00
(Ground surface)

GENERALIZED STRATIGRAPHY Geologist's Log

0 - 8 ft : Slightly Silt Gravel Sand (m)gS
8 - 39 ft : Sandy Gravel

39 - 62 ft : Slightly Silty Sand (m)S

62 - 69 ft : Sand S
69 - 74 ft : Gravelly Sand gS
74 - 91 ft : Slightly Silty Sand (m)S

91 - 100 ft : Silty Sand mS

100 - 117 ft : Slightly Silty Sand (m)S w/caliche

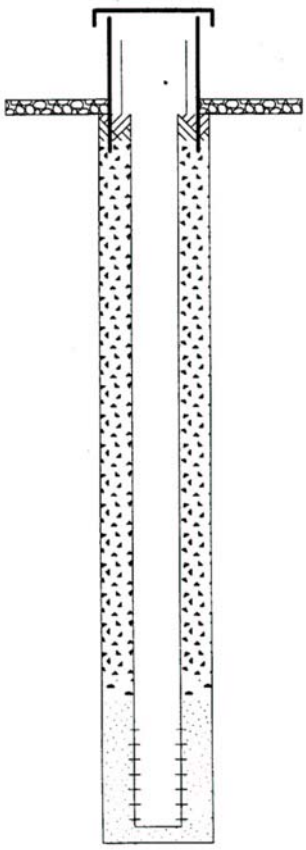
117 - 121 ft : Gravelly Sand gS
121 - 128 ft : Sandy Silt sM
128 - 134 ft : Slightly Silty Sand (m)S
134 - 140 ft : Silty Sandy Gravel msG
140 - 179 ft : Sandy Gravel sG

179 - 188 ft : Silty Sandy Gravel msG

188 - 200 ft : Sandy Gravel sG

200 - 223 ft : Silty Sandy Gravel msG

223 - 280 ft : Sandy Gravel sG



Elevation of Reference Point: m

Height of Reference Point Above Ground Surface:

Depth of Surface Seal: 10.2 ft.

Type of Surface Seal: 4x4 Concrete Pad

Fill	*Casing*	*Screen*
0 - 10.2 ft : 9-inch hole Cement Surface Seal	0 - 236.76 ft : 4 inch 4" 304L SS Sch 5 Csg	
10.2 - 217.8 ft : 9-inch hole Bentonite Crumbles		
217.8 - 225.5 ft : 9-inch hole Bentonite Pellets		236.76 - 271.77 ft : 4 inch 4" 304L SS Wire Wrap .020 slot scrn.
225.5 - 273.77 ft : 9-inch hole 10/20 Silica Sand		
273.77 - 280 ft : 9-inch hole 10/20 Silica Sand	271.77 - 273.77 ft : 4 inch 4" 304L SS Sump	

280 ft : Borehole drilled depth

0 - 280 ft : 9-in. 8-5/8" CS Temp. csg. set Air Rotary Casing Hammer

Drawing By: JEA
Reference: Hanford Wells
Revision: 0
Revision Date: 26Sep00
Print Date: 27Sep00

Report Form: WELLS Project File: WELLS.GPJ

SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS
RESOURCE PROTECTION WELL - 299-W11-42

WELL DESIGNATION	:	299-W11-42
CERCLA UNIT	:	
RCRA FACILITY	:	
DEPTH DRILLED (GS)	:	280.0 ft
MEASURED DEPTH (GS)	:	273.77 13Sep00
AVAILABLE LOGS	:	Geologist
DATE EVALUATED	:	Data not available
EVAL RECOMMENDATION	:	Data not available
LISTED USE	:	RCRA monitoring/sampling
CURRENT USER	:	RCRA & Operations
PUMP TYPE	:	Hydrostar
MAINTENANCE	:	Data not available
COMMENTS	:	8-5/8" CS Temp. csg w/Air Rotary Casing Hammer. Replacement well for C3116.
TV SCAN COMMENTS	:	

Report Form: WELLS Project File: WELLS.GPJ

Drawing By:	JEA
Reference:	Hanford Wells
Revision:	0
Revision Date:	26Sep00
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